Application No.: 10/721,016 Docket No.: DAMADIAN 3.0-080

IN THE CLAIMS

1. (currently amended) A method for magnetic
resonance imaging comprising:

receiving a patient for magnetic resonance imaging at a facility, the facility having a first magnetic resonance imaging scanner and second magnetic resonance imaging scanner, the first scanner being large enough to allow at least the torso of a patient to be scanned and the second scanner being large enough to allow only an extremity or the head of a patient to be scanned; and

selectively directing said received patient to the first magnetic resonance scanner or to the second magnetic resonance scanner;

wherein the first magnetic resonance scanner and the second magnetic resonance scanner are independently operable; and

wherein selectively directing comprises executing on a processor, maintaining a list of said received patients in a queue, accessing said maintained list, and processing said list so as to selectively direct said received patients to either the first or second magnetic resonance scanner.

- 2. (original) The method of claim 1 further comprising selectively directing subsequently received patients to the first magnetic resonance scanner or to the second magnetic resonance scanner.
- 3. (original) The method of claim 1 further comprising:

receiving another patient at the facility; and simultaneously scanning said received patient in the first magnetic resonance scanner and said another received patient in the second magnetic resonance scanner.

4. (original) The method of claim 1 further comprising:

receiving another patient at the facility; and simultaneously scanning said received patient in the second magnetic resonance scanner and said another received patient in the first magnetic resonance scanner.

5. (original) The method of claim 1 further comprising:

orienting said received patient such that said received patient is in a recumbent position;

placing said received patient's head in the second scanner; and

scanning said received patient's head.

- 6. (original) The method of claim 1 further comprising scanning said received patient's foot with the second scanner as said received patient is oriented in a weight bearing position in the second scanner.
 - 7. (canceled)
- 8. (currently amended) A method for magnetic resonance imaging comprising:

selecting a first patient to be scanned at a facility, the facility having a first magnetic resonance imaging scanner and second magnetic resonance imaging scanner, the first scanner being large enough to allow at least the torso of a patient to be scanned and the second scanner being large enough to allow only an extremity or the head of a patient to be scanned;

scanning said first patient using the first imaging scanner;

selecting a second patient to be scanned at the facility; and

scanning the extremity or head of said second patient using the second scanner;

wherein the first imaging scanner and the second imaging scanner are independently operable; and

wherein the steps of selecting a first patient and selecting a second patient comprise executing on a processor, maintaining a list of patients in a queue, accessing said maintained list, and processing said list so as to selectively direct said received patients to either the first or second magnetic resonance scanner.

- 9. (original) The method of claim 8 further comprising performing scanning substantially simultaneously.
- 10. (currently amended) A facility for performing magnetic resonance imaging, comprising:

a first magnetic resonance imaging apparatus capable of producing an image of a patient's torso; and

an extremity scanner adapted to produce an image of a patient's extremity or head; and

a processor maintaining a list of received patients in a queue for selectively directing received patients to either the first magnetic resonance imaging apparatus or the extremities scanner;

wherein the first magnetic resonance imaging apparatus and the extremities scanner is independently operable.

- 11. (original) The facility of claim 10, wherein said first magnetic imaging apparatus further comprises a first magnet defining a substantially horizontal first field axis and a first imaging volume surrounding said first field axis, said first imaging volume having a vertical dimension in a direction transverse to the direction of said first field axis and a horizontal dimension in a direction parallel to the direction of said first field axis.
- 12. (original) The facility of claim 11, wherein said first magnetic imaging apparatus further comprises a patient support capable of supporting a patient with the long

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axis of the patient's torso in a substantially vertical orientation and moving the patient upwardly and downwardly so as to align a region of the patient's torso with the first imaging volume.

- 13. (original) The facility of claim 12, wherein said patient support is capable of supporting a patient in a weight bearing position.
- 15. (original) The facility of claim 10, wherein said second magnetic imaging apparatus includes a second magnet defining a substantially second horizontal field axis and a second imaging volume surrounding said second field axis, said second imaging volume having a vertical dimension in a direction transverse to the direction of said second field axis and a horizontal dimension in a direction parallel to the direction of said second field axis.
- 16. (original) The facility of claim 14, wherein said second magnetic imaging apparatus includes a patient support capable of positioning a patient's extremity or head within the second imaging volume.
 - 17. 19. (canceled)
- 20. (currently amended) A combination for performing magnetic resonance imaging scanning, comprising:

an extremity scanner having a patient receiving space large enough to accommodate only an extremity or head of a patient; and

a torso scanner having a magnet defining a substantially horizontal field axis and an imaging volume surrounding said field axis, a patient support capable of supporting a human patient with the long axis of the patient's

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torso in a substantially vertical orientation and means for moving said patient support about said imaging volume such that a scan of the patient's torso can be obtained; and

a processor maintaining a list of received patients in a queue for selectively directing received patients to either the extremity scanner or the torso scanner;

wherein the extremities scanner and the torso scanner are independently operable.